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# ANALYSIS OF ASPECTS OF THE DOQ-IT METHOD ON THE READINESS OF THE IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS AT THE AISYIYAH GENERAL HOSPITAL PADANG YEAR 2024

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### ABSTRACT

According to Electronic Medical Records must be implemented by health facilities, as regulated by the Regulation of the Minister of Health of the Republic of Indonesia no. 24 of 2022, health facilities must implement Electronic Medical Records by December 31, 2023. In order to fulfill this regulation, health facilities need to prepare all the components needed in the implementation of The implementation of electronic medical records was analyzed in this study DOQ-IT method at Aisyiyah General Hospital Padang. This research is quantitative with a descriptive approach. The sample in the study was 40 officers related to RME. The data collection method used a questionnaire. Assessment of readiness in each component The assessment and readiness scoring for electronic health records (EHR) were carried out by the Doctor's Office Quality - Information Technology (DOQ-IT). The variables studied included human resources, organizational work culture, leadership governance, and infrastructure. The total score at Aisyiyah Padang General Hospital in the implementation of electronic medical records is 142,075 in category III, which is very ready in The evaluation of electronic medical records focused on human resources, organizational work culture, and leadership governance, each rated at 4.4.infrastructure 4.3 In terms of these four components, Aisyiyah Padang General Hospital is generally very ready to implement electronic medical records, but overall it cannot be said that it is ready yet to have the latest SOPs, there are still complaints from officers, in one polyclinic there is still one account shared in Electronic medical records are implemented.

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### 1. INTRODUCTION

documents that encompass patient identity, examination details, treatment procedures, actions taken, and other services rendered to patients. The regulation mandates that all healthcare facilities must adopt Electronic Medical Records by December 31, 2023. [2]. Electronic Medical Records serve as comprehensive, lifelong health records maintained in digital format, documenting an individual's health information. These records are collaboratively created by various healthcare professionals during each interaction with patients, ensuring an integrated approach to health management. [3].

The *Doctor's Office Quality-Information Technology* (DOQ-IT) method is also defined as an assessment instrument to assess the readiness of the implementation of electronic medical records in health care facilities that was created on a national initiative so that it can be known the lack of preparation before the implementation of electronic medical records (Doctor's Office Quality-Information Technology, 2009).

While other research by Sundari et al 2023 entitled "Measuring the Level of Preparation for the Implementation of Electronic Medical Record Systems with the DOQ- IT approach at RSUD dr. Rasidin Padang" It was shown that the total readiness score of RSUD dr. Rasidin Padang was 141.89, in category I which identified very high readiness in the implementation of RME.

Based on an initial survey conducted at the medical records unit of Aisyiyah Padang Hospital. Manual medical records are not neatly stored, indicating that the current storage system is inefficient and vulnerable to damage or loss of data. Data stored in paper form is at risk of loss or damage, the use of paper as a storage medium has a high risk of data loss or damage. This can threaten the sustainability of medical record information. Long searches for medical records due to the absence of an integrated system, causing difficulties in searching and accessing older medical records. This can slow down the health service process. To overcome these problems, it is necessary to analyze the readiness of the implementation of Electronic Medical Records (RME) at RSU Aisyiyah Padang.

So from the above problems, the author raises the title "Analysis of Aspects of the DOQ-IT Method on Readiness for Implementation of Electronic Medical Records at Aisyiyah Padang General Hospital".

### 2. METHODS

A quantitative study is conducted in this research a descriptive approach that will discuss the Analysis of Aspects of the DOQ-IT Method on Electronic Medical Records at Aisyiyah General Hospital Padang. The method used is DOQ-IT with the type of *sampling* is *saturated* sampling (total sampling). This research will be conducted in May 2024 at Aisyiyah General Hospital Padang. The population in this study were all medical record officers, nurses, doctors at Aisyiyah Padang General Hospital, totaling 40 people. The variable in this study is the Analysis of Aspects of the DOQ-IT Method on the Readiness of Electronic Medical Record Implementation at Aisyiyah Padang General Hospital with sub-variables of Human resources, organizational work culture, leadership governance, and infrastructure were assessed. Data collection using observation, questionnaires and literature studies.

### 3. RESULTS AND DISCUSSION

## **3.1.** Frequency Distribution of Respondents

3.1.1. Gender

Table 1           Frequency Distribution by Gender					
Characteristics	Frequency(F)	Percent(%)			
Male	8	20.0%			
Female	32	80.0%			
Total	40	100.%			

Based on table 4.1, it can be seen that of the 40 respondents, the most are female respondents from male respondents.

#### Characteristics Frequency (F) Percent (%) 20-30 years 23 57,5% 31-40 years old 27,5% 11 41-50 5 12,5% >51 years old 2,5 % 1 Total 40 100%

### 3.1.2. Age

Based on table 4.2 the age of respondents at Aisyiyah General Hospital Padang Padang is more than the most aged 20-30 years (57.5%).

### 3.1.3. Education

Lucuton	Table 3				
Frequency Distribution According to ' Education					
Characteristics	Frequency(F)	Percent(%)			
DIII	16	40,0%			
SI	16	40,0 %			
Dr. Profession	8	20,0%			
Total	40	100%			

Based on table 4.3, it can be seen that the last education of respondents is mostly with DIII and SI graduates as many as 16 people (40.0%),

### 3.1.4. Length of Service

Characteristics	Frequency (F)	Percent (%)
1-5 years	19	47.5%
6-10 years	14	35.0%
11-15 years	4	10.0%
16-20 years	3	7.5%
Total	40	100%

 Table 4

 Frequency Distribution According to ' Tenure

Based on table 4, most of the respondents' tenure is in the range of 1-5 years as many as 19 people (47.5%).

### 3.1.5. Interpretation of HR, BKO, TKK, Infrastructure Table 5

		Table 5		
Research Components	Ν	Mean	Average Score	Category
Human Resources	18	31.25	4,4	Very Ready
Organizational Work Culture	18	44.65	4,4	Very Ready
Leadership Governance	18	35.97	4,4	Very Ready
Infrastructure	18	30,20	4,3	Very Ready
Total		142.075	4,4	

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Based on table 4.5, the average score of the four variables is 4.4, indicating that RSU Aisyiyah Padang is very ready to implement electronic medical records. The assessment for the four variables is in the range of 4-5 which means very ready. This research is in line with research (Hapsari & Mubarokah, 2023) the higher the score, the higher the level of readiness for each element. Of the four variables, human resources fall into the very ready category (score 4.4), the Organizational Work Culture variable falls into the very ready category (score 4.4), the Organizational Governance variable falls into the very ready category (score 4.4), and the Infrastructure variable falls into the very ready category (score 4.3).

The overall score at RSU Aisyiyah Padang is 1420.75, which is in category I, i.e. a score of 98-145, indicating that RSU Aisyiyah Padang is very well prepared for the implementation of electronic medical records. Of the four variables assessed, if described by a graph, the readiness area will appear as shown in Figure 4.6 below:

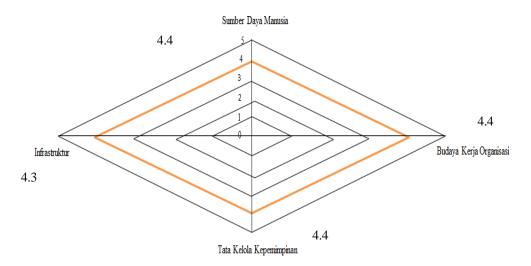


Figure 4.1 RME Implementation Area Chart at Aisyiyah General Hospital Padang

### **Description:**

**Implementation area of RME implementation.** 

Based on Figure 4.6 Aisyiyah Padang General Hospital is very ready in readiness for The implementation of electronic medical records, seen from the graph above 4 variables consisting of Human resources (4.4), organizational work culture (4.4), and leadership governance were assessed (4.4), and infrastructure (4.3), it can be concluded that the assessment score of the four variables above is at score 4, so it is said to be very ready in the implementation of electronic medical records.

### 4. CONCLUSIONS

Based on the components of human resources, organizational work culture, leadership governance, and infrastructure, RSU Aisyiyah Padang is very ready for the implementation of electronic medical records. With an overall score of 1420.75, this score falls into category I, namely a score of 98- 145, which indicates that RSU Aisyiyah Padang is very ready for the implementation of electronic medical records.

- 1. Aisyiyah General Hospital Padang should immediately update the SOP or create a new SOP related to Electronic Medical Records with a fairly high score in several components, such as human resources, organizational work culture, leadership governance and infrastructure.
- 2. General Hospital aisyiyah Padang is expected to carry out the process of readiness for the implementation of the RME process work and discuss human resources who will carry out RME so that later the implementation of RME runs smoothly

### REFERENCES

- [1] Amran, R., Apriyani, A., & Dewi, N. P. (2022). The Important Role of Completeness of Medical Records in Hospitals. *Baiturrahmah Medical Journal*, *1* (September 2021), 69-76.
- [2] Apriliyani, S. (2021). The Use of Electronic Medical Records to Support the Effectiveness of Outpatient Registration at Dr. Ranny's Clinic. *Cerdika: Indonesian Scientific Journal*, 1(10), 1399-1410. https://doi.org/10.36418/cerdika.v1i10.209
- [3] Faida, E. W., & Ali, A. (2021). Readiness Analysis of Electronic Medical Record Implementation with the DOQ-IT (Doctor's Office Quality-Information Technology) Approach. *Indonesian Journal of Health Information Management*, 9(1), 67. https://doi.org/10.33560/jmiki.v9i1.315
- [4] Fitriani Astika. (2020). Implementation of Electronic Medical Record (EMR) at Hospital "X" Pekanbaru in 2019. *Journal of Hospital Management and Health Sciences (JHMHS)*, *1*(1), 43-53. http://journal.al- matani.com/index.php/jhmhs/article/view/26
- [5] Gunawan, T. S., & Christianto, G. M. (2020). Medical Records/Electronic Health (RMKE): Health System Integration. *Indonesian Journal of Medical Ethics*, 4(1), 27. https://doi.org/10.26880/jeki.v4i1.43
- [6] Hapsari, M. A., & Mubarokah, K. (2023). Analysis of Readiness to Implement Electronic Medical Records (RME) with the Doctor's Office Quality-Information Technology (DOQ-IT) Method at the Polkesmar Primary Clinic. 4(2), 75-82. <u>https://doi.org/10.25047/j-remi.v4i2.3826</u>
- [7] Hidayat, A. R. (2017). Readiness Assessment Analysis of Electronic Medical Record Implementation at the Pku Muhammadiyah Pakem Inpatient Clinic.
- [8] <u>http://ejournal.ijmsbm.org/index.php/ijms/a\_rticle/view/106/0</u>
- [9] Karma, M., Wirajaya, M., & Carla, F. (2021). Factors Affecting Delay in Returning Medical Records of Hospitalized Patients in Hospitals: A Literature Review. 6(3).
- [10] Ministry of Health RI. Regulation of the Minister of Health RINO. 82 Year 2013 on Hospital Management Information System. Indonesia; 2013
- [11] Kesuma, S. I. (2023). *Electronic Medical Records in Hospital Services in Indonesia: Legal Aspects and Implementation*. 1(1). https://ejurnalqarnain.stisnq.ac.id/index.php/ALADALAH/article/view/188/181
- [12] Kholili, U. (2011). Introduction of Medical Record Science to the Community and the Obligations of Health Workers in Hospitals. *Journal of Community Health*, 1(2), 60-72. https://doi.org/10.25311/keskom.vol1.iss2.12
- [13] Maha Wirajaya, M. K., & Made Umi Kartika Dewi, N. (2020). Analysis of Readiness of Dharma Kerti Tabanan Hospital to Implement Electronic Medical Records. *Journal of Vocational Health*, 5(1), 1. https://doi.org/10.22146/jkesvo.53017
- [14] Meianti, A., Rohman, H., & Mayretta, A. (2018). Implementation Planning of Medical Record Work Unit for Primary Clinic Pancasila Baturetno Wonogiri. *Indonesian Journal of Health Information Management*, 6(2), 135. https://doi.org/10.33560/.v6i2.198
- [15] Rubiyanti, S. N. (2023). Implementation of Electronic Medical Records in Hospitals in Indonesia: AJuridical Study. *ALADALAH: Journal of Politics, Social, Law and Humanities, 1*(1), 179-187.
- [16] Sudirahayu, I., & Harjoko, A. (2020). Readiness Analysis of Electronic Medical Record Implementation Using DOQ-IT at Dr. H. Abdul Moeloek Lampung Hospital. *Journal of Information Systems for.*